

STATE OF MAINE  
PUBLIC UTILITIES COMMISSION

Docket No. 2004-217

April 16, 2003

PUBLIC UTILITIES COMMISSION Notice  
to Verizon New England Inc. d/b/a Verizon  
Maine of Failure to Comply with  
Requirements of Chapter 140 (Utility  
Service Area and Infrastructure Maps)

PRELIMINARY NOTICE OF  
VIOLATION AND ORDER  
REQUIRING COMPLIANCE

WELCH, Chairman; DIAMOND and REISHUS, Commissioners

---

**I. SUMMARY**

We provide preliminary notice to Verizon New England Inc. d/b/a Verizon Maine ("Verizon"), pursuant to 35-A M.R.S.A. § 1508-A(1)(B), that it is not in compliance with the requirement of a Commission Rule, Chapter 140, §3(A). Following consideration of any comments that Verizon may file, we will determine whether to issue a final notice of violation and order to comply with the Rule.

Chapter 140 is entitled "Utility Service Area and Infrastructure Maps." Section 3(A) requires all utilities that have "infrastructure" in Maine to:

...develop and maintain current maps showing the key infrastructure used or available for use by the utility for the production, transport, transmission, and distribution of services in Maine. ... Maps must be filed in both paper and electronic (GIS) form ...

As further described below, Verizon has not filed its transmission (switching and interoffice) infrastructure information in the formats required by Section 3(A) by the most recently established deadline of September 30, 2003 (extended from the July 1, 2002 deadline in the Rule by the Acting Director of Technical Analysis).<sup>1</sup> Following our consideration of Verizon's response to this preliminary notice, we will determine whether to issue a notice of violation and order Verizon to file the "paper and electronic (GIS)" maps we believe is required by Section 3(A). The factual assertions and legal analysis contained in this preliminary notice represent our present tentative conclusions, subject to revision upon review of any comments and argument that Verizon may file.

---

<sup>1</sup> Verizon is subject to a different deadline for the filing of *distribution* (feeder, DLC, and PSAP) infrastructure information. That deadline is July 1, 2004, pursuant to an extension also granted by the Acting Director of Technical Analysis from the April 1, 2004 deadline contained in Section 3(F) of the Rule.

35-A M.R.S.A. § 1508-A provides for “Administrative Penalties.” Subsection 1(B) states:

For a violation in which a public utility or a competitive electricity provider was explicitly notified by the commission that it was not in compliance with the requirements of this Title, a commission rule or a commission order and that failure to comply could result in the imposition of administrative penalties, the commission may impose an administrative penalty that does not exceed \$500,000.

If Verizon chooses not to oppose the issuance of a final notice or if we reject the arguments it makes opposing that action, we will issue a Notice of Violation that will serve as “explicit notice” under Section 1508-A(1)(B) that Verizon Maine is in violation of Chapter 140, § 3(A). We also will issue a Order to Comply with Section 3(A) of Chapter 140. If Verizon fails to comply within the time limit stated in the order, it will be subject to possible administrative penalties under Section 1508-A(1)(B).

## II. BACKGROUND

### A. The Rule and Its Requirements.

After the January 1998 ice storm, we recognized the benefit of geographic information systems (GIS) in planning, mitigation, outage, and restoration management, and accordingly determined to expand the Commission’s GIS capabilities. See *Public Utilities Commission, Inquiry into the Response by Public Utilities in Maine to the January 1998 Ice Storm*, Docket No. 98-026, Order (Dec. 29, 1998) at 46. On October 19, 2001, the Commission adopted Chapter 140 of its Rules to require certain public utilities to develop, maintain, and file with the Commission maps of their service area and key infrastructure. *Public Utilities Commission, Utility Service Area and Infrastructure Maps (Chapter 140)*, Docket No. 2001-284, Order Adopting Rule and Statement of Factual and Policy Basis (Oct. 19, 2001) (Chapter 140 Order).

In adopting Chapter 140, we recognized the use of GIS as an important technical resource, consistent with State priorities, and observed that utilities that develop GIS appear to improve their technical management capabilities and effectiveness in identifying and responding to service-delivery problems. We adopted the Rule, in part, to enhance utilities’ ability to furnish “safe, reasonable and adequate facilities and service,” as required by Maine law, to enhance the Commission’s ability to review utility compliance with that law, and to facilitate our support of emergency management activities. Chapter 140 Order at 4-5.

Chapter 140 became effective on October 29, 2001. The Rule requires local exchange carriers (LECs), including Verizon, to develop and file current maps of

their key infrastructure in both paper and electronic (GIS) form, and to file such maps beginning on July 1, 2002. The Rule states:

Requirement to File Infrastructure Maps. All utilities subject to the requirements of this Chapter (except T&D utilities that provide service only on offshore islands) with facilities in Maine must develop and maintain current maps showing the key infrastructure used or available for use by the utility for the production, transport, transmission, and distribution of services in Maine. Infrastructure maps must incorporate key infrastructure attributes defined in this Chapter. Utilities must prepare as many infrastructure maps as needed to include their entire service area in Maine. Maps must be filed in both paper and electronic (GIS) form . . .

MPUC Rules, Ch. 140, § 3(A).

Chapter 140 does not require a utility to file information that it does not possess. Section 3(B) of the Rule therefore provides:

Single-Line Diagrams. If a utility does not have geographically-located data on certain infrastructure lines, it may file a map that shows the lines between its geographically-located midpoints and endpoints as representational point-to-point lines, in lieu of geographically-located lines.

MPUC Rules, Ch. 140 § 3(B).<sup>2</sup> The Rule also allows a waiver “where good cause exists, provided that the granting of the waiver would not be inconsistent with the purposes of [Chapter 140] or Title 35-A.” MPUC Rules, Ch. 140 § 4.

B. Verizon’s Compliance with Chapter 140

During the Chapter 140 rulemaking proceeding, we addressed reservations expressed by Verizon about the proposed Rule:

Verizon questioned our need for this information and suggests that it would require “significant work efforts,” although Verizon did not conduct a cost-benefit analysis of those efforts. Verizon commented that it maintains its infrastructure information “in multiple formats [and] in multiple information systems,” and compiling that information into a single source in map form would be a “massive undertaking” that “may not be justified,” although possibly desirable “in the long-run.” We are concerned that Verizon’s inability to compile information on narrowly-determined elements of its network from multiple sources may compromise Verizon’s ability to

---

<sup>2</sup> In *Public Utilities Commission, Investigation of AT&T of New England, Inc. for Failure to Comply with Requirements of Chapter 140 (Utility Service Area and Infrastructure Maps)*, Docket No. 2003-129, the Commission allowed AT&T to file GIS-format single-line diagrams for lines that it leased from another carrier.

manage its network efficiently. We have independently recognized that this constraint complicates our own ability to obtain timely accurate information about Verizon's systems. We note that Verizon acknowledges that such a compilation could be beneficial "in the long-run," and believe that Verizon should begin that process now. As described below, we are relaxing the schedule under which this information must be reported, which should allow Verizon and other utilities to modify their systems as needed to comply with the Rule.

Chapter 140 Order at 15-16.<sup>3</sup>

Although it filed *service area* information in paper and GIS form as required by Section 2 of Chapter 140, Verizon did not file any of the transmission (switching and interoffice) *infrastructure* information required by Section 3 of Chapter 140 by the deadline in the Rule, July 1, 2002. (Distribution infrastructure information was due on April 1, 2004; as explained below, the Acting Director of Technical Analysis extended that deadline for Verizon until July 1, 2004.) Verizon did not request a waiver of the applicable filing requirements or an extension of the deadline.

On October 18, 2002, after discussions with the Staff, Verizon filed some of its transmission (switching and interoffice) infrastructure information. That filing did not meet the content or the format requirements of Chapter 140, and contained information in the form of a single-line diagram, but not geographically-located infrastructure data "that shows features within  $\pm 40'$  ( $\pm 12.2\text{m}$ ) of their actual location on the ground". See Sections 1(C) and 1(D) of Chapter 140. Further, the data was not filed in electronic (GIS) form as required in Section 3(A) of Chapter 140.

After further discussions between Verizon and the Staff during the following months, on June 6, 2003, Edward B. Dinan, Verizon President & CEO-Maine, sent a letter to Commission Chairman Welch, stating that "Verizon expects to comply fully [with Chapter 140] by July, 2004." The letter acknowledged that Verizon was aware that its prior filing was "not in GIS format" and explained:

Implementing GIS mapping is a major undertaking for Verizon. It requires the collection of data on key infrastructure attributes from various internal Verizon sources, employing several independent databases. Verizon has also retained an outside vendor to provide programming expertise and build the actual mapping application. After confirming that the proposed application meets the Rule's requirement, Verizon can proceed to populate the application with the collected data on

---

<sup>3</sup> Verizon's comments also sought clarification on various technical requirements of the Rule, including the assignment of V&H (vertical and horizontal) coordinates to interoffice facilities, the frequency of the need to update data on its digital line carrier systems, and the information that the Rule requires to be provided on SONET nodes. Chapter 140 Order at 23-24.

infrastructure attributes through year-end 2003. If everything proceeds as planned, Verizon expects to have Phase I infrastructure maps to re-file in required GIS format in September of 2003. Verizon's completed maps reflecting our key infrastructure with attributes should be ready for filing by the July, 2004 deadline set forth in the Rule."

On June 24, 2003, the Commission's Acting Director of Technical Analysis responded to Mr. Dinan's letter stating that Verizon "has not filed all the information required" by Chapter 140. The Director, on her own motion, granted Verizon extensions to the Rule's deadlines consistent with the dates reflected in Mr. Dinan's letter:

In order to prevent further delays and additional paperwork in this case, I will consider whether to permit Verizon Maine to be in noncompliance with the Rule pursuant to the Rule's waiver provision in Section 4. Verizon Maine's letter described the process it is undertaking to comply with that Rule, including database collection and contracted programming activities. I find that Verizon Maine has demonstrated good cause for a waiver, and hereby grant the requested extensions. Accordingly, the deadline set in Section 3(F)(1)(a) for Verizon Maine to file infrastructure transmission maps is extended until September 30, 2003, and by April 1 of each year thereafter. The deadline set in Section 3(F)(1)(b) for Verizon Maine to file distribution infrastructure maps and key infrastructure attributes is extended until July 1, 2004; Verizon shall make updated filings by April 1 of each year thereafter.

*Public Utilities Commission, Utility Service Area and Infrastructure Maps (Chapter 140), Docket No. 2001-284, Order on Waiver (Verizon Maine) (Jun. 24, 2003) at 2.*

On October 1, 2003, Verizon filed a transmission infrastructure map and data that varied only slightly in substance from its filing made one year earlier, in October 2002. The Staff reviewed the October 2003 filing and identified a number of areas where the information filed remained inconsistent with Chapter 140 requirements. The most significant of those deficiencies was the use of "single-line diagram form" information (permitted for only a limited specified circumstance by Section 3(B) of the Rule) rather than the "geographically-located" data required by Section 3(A). The Staff advised Verizon of those deficiencies by e-mail on November 7, 2003.

On November 17, 2003, Verizon advised the Staff in a conference call that it planned to refile its transmission infrastructure map to reflect the Staff's list of deficiencies by the first week in December, but that it would not have time to cure all those deficiencies. The Staff asked Verizon to identify as part of its subsequent filing a specific date by which it could completely comply with the Rule.

On December 4, 2003, Verizon advised the Staff by e-mail that it expected "to re-file the infrastructure map, paper copies and CDs, the beginning of next week." The Commission did not receive that filing.

On January 20, 2004, Chairman Welch wrote to Mr. Dinan and stated that Verizon had not yet met the requirements of Chapter 140, and that because the extension granted the previous June had expired, "Verizon appears to be in violation of Chapter 140." Chairman Welch reminded Mr. Dinan that the Commission "had to take more direct enforcement action with another telephone utility related to its Chapter 140 compliance,"<sup>4</sup> and asked that Mr. Dinan "advise us when Verizon will be in full compliance with Chapter 140 of our Rules" at a periodic meeting on service issues scheduled for January 28, 2004.

On January 27, 2004, Mr. Dinan wrote to Chairman Welch responding to the deficiencies described in the Staff's November 7, 2003 e-mail. As opposed to previous occasions where Verizon promised compliance (thereby admitting, in effect, that it was in noncompliance), the Dinan letter, for the first time, claimed that Verizon's "single-line diagram" infrastructure maps were in compliance with the Rule. We discuss Verizon's argument in detail below.

### **III. VERIZON'S PRESENT GEOGRAPHICALLY-LOCATED DATA**

On February 12, 2004, the Staff met with Verizon personnel at Verizon offices in Portland to review the information and data available to Verizon related to this item, to ascertain if and how Verizon could be brought into compliance with the Rule. The Staff ascertained that:

1. Verizon has geographically-located information on its aerial transmission (switching and interoffice) and distribution (feeder and DLC) facilities, although not currently in GIS format. Verizon maintains "route maps" of its entire service area in Maine for aerial plant, and in some cases, for underground and submarine plant as well. These route maps show the geographic locations and identification (route numbers) of plant in service. Verizon maintains the route maps for all Maine plant in physical form (on Mylar maps) at its Augusta central office building. Verizon has scanned these route maps and makes them available electronically (as .TIF files) to Verizon engineers on the utility's internal web system. Verizon can annotate its route maps electronically (e.g., using a program called VISIO) and then print them to reflect specific infrastructure of interest.<sup>5</sup>

2. The manner in which Verizon maintains its circuit information makes it very difficult to relate geographically-located route information to the circuit(s) on those routes and their function (e.g., to trace the physical path of a specific circuit such as a host-to-remote umbilical circuit). Verizon maintains "cable plats" of its interoffice and distribution infrastructure that are in a form that is not accurately

---

<sup>4</sup> The utility was AT&T of New England. See footnote 2 above.

<sup>5</sup> Further, Maine electric transmission and distribution utilities already maintain GPS/GIS data on most of the poles to which Verizon attaches, which Verizon could use to supplement the route map data it already maintains.

geographically-located. These plats cover both aerial and underground facilities, and identify Verizon circuits that enter and leave manholes, splice boxes, and central office switch locations. Some of the plats include circuit type, date, and other attribute information. Verizon also maintains the plats in physical form in the Augusta central office building. Verizon estimates that it maintains about 40,500 route maps and plats combined. Based on a Verizon-provided overview for the Staff of a Portland-area circuit, the Staff estimates that number may include over 2,000 separate route maps.

3. Verizon does not appear to have complete geographically-located information on its underground transmission or distribution facilities. Verizon states that it does not maintain complete route maps of all of its underground systems, but instead, to the extent that its field personnel and engineers are personally familiar with the facilities in question, Verizon relies on cable plats and conduit plats to identify a manhole or conduit of interest. Verizon states that “[i]f an engineer needs to know where a particular manhole is, the engineer looks at the plats and then, if he or she is not familiar with the area, the engineer would refer to a regular city map.”

#### IV. VERIZON’S CLAIM THAT IT HAS COMPLIED WITH THE RULE

Chapter 140 requires utilities to file geographically-located maps and data on their infrastructure to the extent to which they have such data. Verizon’s position is that its most recent filing (October 1, 2003),<sup>6</sup> containing point-to-point “single-line diagram form” information rather than “geographically-located” information, meets Chapter 140 requirements. Verizon states that it plans to provide point-to-point (not geographically-located) data for the next phase of Chapter 140 filings – its distribution infrastructure – due, pursuant to an extension granted by the Acting Director of Technical Analysis, on July 1, 2004. As noted above, Verizon, in its letter of January 27, 2004, claimed that it is not required to meet the requirements of Chapter 140, § 3(A) because it does not presently possess the data in the forms (“paper and electronic (GIS)”) required by that subsection. The January 27, 2004 letter from Mr. Dinan argued:

Verizon's use of single line diagrams is expressly authorized by the Rule. Section 3(B) of the Rule states that "if a utility does not have geographically-located data for certain infrastructure lines, it may file a map that shows the lines between its geographically-located midpoints and end points as representational point-to-point lines, in lieu of geographically-located lines." The purpose and intent of this provision was made clear in the Commission's Notice of Rulemaking (May 3, 2001) where it says (on page 6):

"Some utilities may not have geographically-located data on certain lines (e.g., where a utility currently has point-to-point data

---

<sup>6</sup> On January 27, 2004, with the letter from Mr. Dinan discussed below, Verizon again refiled its infrastructure map and data in single-line diagram form (paper map dated December 1, 2003, and data files dated November 24, 2003 or earlier).

but not the actual physical location of such lines in a format that would facilitate its being mapped). Subsection 2 permits utilities to file single-line diagrams illustrating that infrastructure between geographically-located midpoints or endpoints (e.g., remote telephone switches or T&D substations)."

(Emphasis added). Verizon does not have geographically-located data for infrastructure lines "in a format that would facilitate its being mapped". Since this geographically-located information needed for mapping was not available, Verizon filed its maps, showing "lines between its geographically-located midpoints and end points as representational point-to-point lines," in compliance with Section 3(B).

Subject to further argument by Verizon that we find persuasive, we tentatively reject its argument that Section 3(B) allows it to file "single-line diagram form" ("point-to-point") maps if a utility does not possess the data "in a format that would facilitate its being mapped." Under the Rule, Subsection B of Section 3 allows maps in "single-line diagram form" *only* "[i]f a utility does not have geographically-located data on certain infrastructure lines."

The language quoted by Verizon is found only in the NOR. That language suggested that the Section 3(B) exception allowing "single-line diagrams" would apply "where a utility currently has point-to-point data but not the actual physical location of such lines *in a format that would facilitate its being mapped*" (emphasis added). An NOR, however, has no legal effect once a rulemaking is completed. The text of the Rule itself controls. In addition, the NOR language relied on by Verizon was omitted from the OAR.<sup>7</sup>

Section 3(A) requires all utilities to file electronic and paper maps that show the location of infrastructure. Section 3(B) creates an exception *only* for a utility that "does not have geographically-located data for *certain* infrastructure lines" (emphasis added). Verizon has made no claim that it does not have records that show the geographic location of its poles and wires (or even "certain" of them). It therefore "has" the data and is subject to the requirement of Section 3(A) that it provide that data in both "paper and electronic (GIS) form." Verizon also appears to have GIS capability, as indicated by its filing of the service area maps in GIS format as required by Section 2(A), and the single-line diagrams of its transmission (interoffice) infrastructure, also in GIS format.<sup>8</sup>

---

<sup>7</sup> The OAR states only that Section 3(B) allows "a utility that does not possess or have access to geographically-located data on certain infrastructure lines to 'file a map that shows the lines between its geographically-located midpoints and endpoints as representational point-to-point lines.'" Chapter 140 Order at 24.

<sup>8</sup> In attempting to rely on the purported exception that its geographically-located data is not presently in GIS form, Verizon has not claimed that it lacks GIS capability.

Verizon's argument that it does not have to provide the data in the form specified by Section 3(A) makes no sense as a matter of policy (notwithstanding the language of the NOR). Plainly, the intent of the Rule is to require utilities to become GIS-capable (either internally or by contracting for GIS services), to maintain specified infrastructure information in GIS format, and to provide the Commission with all geographically-located information it possesses in GIS format. A rule that reads as Verizon argues would allow a utility to frustrate those policies simply by claiming that it does not have GIS capability or that, although it does have GIS capability, it has not yet translated its existing geographically-located data into that format.

The proceeding against AT&T involved a similar issue. We rejected a similar position taken by AT&T that it could file single-line diagrams of its infrastructure, and specifically stated: "We interpret the Rule to require that maps show an accurate depiction of all facilities." *Public Utilities Commission, Investigation of AT&T of New England, Inc. for Failure to Comply with Requirements of Chapter 140 (Utility Service Area and Infrastructure Maps)*, Docket No. 2003-129, Order on Waiver Request (Jun. 30, 2003) at 4. Virtually all other utilities to which Chapter 140, § 3 applies, including other incumbent local exchange carriers (ILECs), have provided the infrastructure maps and data required by the Rule.

Verizon has not stated why it is unable to provide the data in question in geographically-located form. Indeed, in its June 6, 2003 letter, Verizon stated that it considered the project "a major undertaking" and that it had "retained an outside vendor to provide programming expertise and build the actual mapping application." Thus, even if it does not presently have the required data in the form required by Section 3(A) of Chapter 140, the Rule requires it to do so. We have provided Verizon with ample time to prepare the data in the form required by the Rule. We have already granted it a waiver to file the required maps more than 15 months after the deadline set in the Commission Rule – a waiver that expired in September 2003.

Based on the Commission staff's review of maps and data available to Verizon within Maine, it appears that Verizon has sufficient geographically-located data depicting its aerial transmission and distribution facilities to enable it, by acquiring the GIS capability that we believe is required by the Rule and, with reasonable effort, to comply with the paper and electronic filing requirements of Chapter 140 for that information.

#### IV. FURTHER PRELIMINARY PROCEEDINGS

Verizon may respond to this preliminary notice by filing comments on or before **April 30, 2004**. Verizon's comments may address the Commission's legal analysis, set forth above, of Chapter 140, § 3(A)(B). Verizon may also comment on the Commission's tentative conclusions concerning the present state of its geographically-located data. Following receipt and consideration of Verizon's comments, we will determine our future course of action, which could include a formal notice of noncompliance with Chapter 140 and an order to comply as described in 35-A M.R.S.A. § 1508-A(1)(B). The order to comply would require Verizon to file geographically-

located maps (rather than single-line diagrams) in paper and GIS forms for its aerial transmission (switching and interoffice) facilities and underground transmission facilities for which it has geographically-located data..

## V. ORDERING PARAGRAPHS

Accordingly, we

1. Provide NOTICE to Verizon New England Inc. d/b/a/ Verizon Maine, pursuant to 35-A M.R.S.A. § 1508-A(1)(B), that the Commission has tentatively concluded that it has not complied with a Rule of the Commission, Chapter 140, Section 3(A);
2. NOTIFY Verizon that it may file comments addressing the matters described in Part IV above on or before **April 30, 2004**;
3. Provide NOTICE to Verizon Maine that, following consideration of any comments it might file, the Commission may order it to comply with the filing and format requirements of Chapter 140, § 3(A) for aerial transmission infrastructure information and such underground transmission infrastructure information as it currently possesses in "geographically-located" form within one month following the issuance of such an order; and,
4. Provide NOTICE to Verizon Maine that if the Commission issues the order described above, Verizon Maine's failure to comply with the requirements of Chapter 140, § 3(A) and the order will result in the initiation of a proceeding to impose a penalty as provided in 35-A M.R.S.A. § 1508-A(1)(B).

Dated at Augusta, Maine, this 16<sup>th</sup> day of April, 2003.

BY ORDER OF THE COMMISSION

---

Dennis L. Keschl  
Administrative Director

COMMISSIONERS VOTING FOR:      Welch  
   Diamond  
   Reishus

## NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.
2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within **21 days** of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.
3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.